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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/755,844

01/12/2004

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1890-0037

8442

7590

01/10/2006

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EXAMINER

MALSAWMA, LALRINFAMKIM HMAR

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/755,844

Applicant(s)

AHRENS ET AL.

Examiner

Lex Malsawma

Art Unit

2823

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 December 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

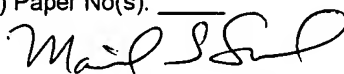
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 26.
Claim(s) objected to: 16 and 18-25.
Claim(s) rejected: 1-7, 9-11, 13-15 and 17.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☒ Other: see continuation sheet.


MATTHEW SMITH
JUNIOR PATENT EXAMINER
TECHNOLOGY CENTER 2800

Applicant's remarks/arguments have been fully considered, but they are not persuasive. With respect to claim 1 (and all claims depending therefrom), the applicant asserts that Yao fails to teach selectively removing the contact structure with at least the seed layer acting as a stop layer; and in support for this assertion, the applicant submits that neither the raised area 110 has not been removed down to the seed layer 105, nor has the metal layer 106 that is shown in the recess 114. The examiner disagrees with the applicant's assertion primarily because the Yao clearly shows in Figs. 1A-1B that during the process for removing the metal layer 106, the barrier/seed layer 105 is exposed in at least three regions (as viewed in Fig. 1B), i.e., it is clear that the barrier/seed layer 105 acts as a stop layer in at least these three regions, regardless of whether the raised area 110 has been removed. Furthermore, Fig. 1B clearly shows that the metal layer 106 has been removed to a depth "R" within the recess 114, i.e., although the metal layer 106 has not been completely removed from within the recess 114, at least a portion of the metal layer within the recess has been removed. In any case, there is no requirement in claim 1 for removing the contact structure from within a recess, for that matter, there is nothing in claim 1 that requires complete removal of the contact structure, but rather, the claim requires SELECTIVELY removing the contact structure. In sum, Yao clearly teaches selectively removing the contact structure 106 such that the barrier/seed layer 105 acts as a stop layer in at least three regions.

With respect to new claim 27, this claim does NOT include all the limitations found in claim 16 as objected to in the final Office action, i.e., new claim 27 excludes some of the limitations recited in claim 1; accordingly, this claim will at very least require further consideration and search before a determination in regards to its patentability can be properly made.

AM.